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Comparison of Selected Stock Exchanges in China and in the USA

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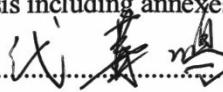
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1 Introduction

Stock exchanges are legal persons that provide places and facilities for centralized securities trading, organize and supervise securities trading, and implement self-regulatory management. A stock exchange is a market for trading securities (such as stocks, corporate bonds, government bonds, treasury bills, and transferable certificates of deposit).

The earliest stock exchange in the world is the Amsterdam Exchange of the Netherlands, established in 1602 by the Dutch East India Company. In China, the earliest stock exchanges were the Shanghai Zhongye Foreign Affairs Office in 1905 and the Peking Stock Exchange in 1918. The emergence of stock exchanges has created a permanent market for securities trading and has become an institution where monetary capital can realize long-term investment.

The purpose of my thesis is to compare stock exchanges between China and the United States. In Chapter 2, I will first introduce the characteristics of stock exchanges and all the functions of stock exchanges. In Chapter 3, Chinese stock exchanges will be introduced. In the Chapter 4 is description of the development of the US stock exchanges. In the Chapter 5 is comparison of the Shanghai Stock Exchange, Shenzhen Stock Exchange, Hong Kong Stock Exchange in China and, New York Stock Exchange and Nasdaq in the USA. I compare these stock exchanges in history, trading methods, IPO, index, market value, rules, and regulations and so on.

2 Characteristics of Stock Exchanges

Stock Exchange (also called Stock Market or Share Market) is one important constituent of capital market. Stock Exchange is an organized market for the purchase and sale of industrial and financial security. It is convenient place where trading in securities is conducted in systematic manner i.e. as per certain rules and regulations. Stock exchange is an organized market for buying and selling corporate and other securities. Here, securities are purchased and sold out as per certain well-defined rules and regulations. It provides a convenient and secured mechanism or platform for transactions in different securities. Such securities include shares and debentures issued by public companies which are duly listed at the stock exchange, and bonds and debentures issued by government, public corporations and municipal and port trust bodies. It performs various functions and offers useful services to investors and borrowing companies. It is an investment intermediary and facilitates economic and industrial development of a country. Stock exchanges are indispensable for the smooth and orderly functioning of corporate sector in a free market economy. A stock exchange need not be treated as a place for speculation or a gambling den. It should act as a place for safe and profitable investment, for this, effective control on the working of stock exchange is necessary. This will avoid misuse of this platform for excessive speculation, scams and other undesirable and anti-social activities.

2.1 Characteristics of Stock Exchange

A stock exchange is a market where stocks, corporate bonds, government bonds and other securities are traded. The stock exchange itself has some characteristics. According to these characteristics, relevant regulations are formulated to plan the stock exchange.

2.1.1 Market for Securities

Stock exchange is a market, where securities of corporate bodies, government and

semi-government bodies are bought and sold. It deals with shares, debentures bonds and such securities already issued by the companies. In short it deals with existing or second hand securities and hence it is called secondary market.²

2.1.2 Regulation of Trading

Stock exchange does not buy or sell any securities on its own account. It merely provides the necessary infrastructure and facilities for trade in securities to its members and brokers who trade in securities. It regulates the trade activities so as to ensure free and fair trade.

In fact, stock exchanges maintain an official list of securities that could be purchased and sold on its floor. Securities which do not figure in the official list of stock exchange are called unlisted securities. Such unlisted securities cannot be traded in the stock exchange.

2.1.3 Transactions Effected

All the transactions in securities at the stock exchange are effected only through its brokers and members. Outsiders or direct investors are not allowed to enter in the trading circles of the stock exchange. Investors have to buy or sell the securities at the stock exchange through the brokers only.

A stock exchange is an association of persons or body of individuals which may be registered or unregistered.

2.1.4 Recognition from Central Government

Stock exchange is a market. It requires recognition from the Central Government. Buying and selling transactions in securities at the stock exchange are governed by the rules and regulations of stock exchange as well as SEBI Guidelines. No deviation from the rules and guidelines is allowed in any case.

2.1.5 Specific Location

Stock exchange is a particular market place where brokers come together daily (i.e.

on working days) on the floor of market called trading circles and conduct trading activities. The prices of different securities traded are shown on electronic boards. After the working hours market is closed. All the working of stock exchanges is conducted and controlled through computers and electronic system.

2.1.6 Financial Barometers

Stock exchanges are the financial barometers and development indicators of national economy of the country. Industrial growth and stability is reflected in the index of stock exchange.

Generally speaking, all four characteristics of securities trading. Organized Market: Stock exchange is an organized market. Every stock exchange has a management committee, which has all the rights related to management and control of exchange. All the transactions taking place in the stock exchange are done as per the prescribed procedure under the guidance of the management committee. Dealings in Securities Issued by Various Concerns: Only those securities are traded in the stock exchange which is listed there. After fulfilling certain terms and conditions, security gets listed on the stock exchange. Dealing only through Authorized Members: Investors can sell and purchase securities in stock exchange only through the authorized members. Stock exchange is a specified market place where only the authorized members can go. Investor has to take their help to sell and purchase. Necessary to Obey the Rules and Bye-laws: While transacting in Stock Exchange, it is necessary to obey the rules and bye-laws determined by the Stock Exchange.

2.2 Functions of Stock Exchange

And the stock exchanges have so many functions. Stock exchange is one of the most important financial intermediaries and plays a very important role in the capital formation and economic development of the country. Given below are some important functions of stock exchanges from economic point of view.

2.2.1 Marketability of Securities

The stock exchange provides for easy marketability of securities as securities can be

³bought and sold conveniently on the floor of the stock exchange. The Stock Exchange provide companies with the facility to raise capital for expansion through selling shares to the investing public and on the other hand provides investors with a platform to trade these shares.

2.2.2 Price Determination & Continuity

Since transactions take place regularly on a stock exchange there is continuity in the dealings. Supply and demand in stock markets are driven by various factors and this balance of supply and demand affects the price of stocks. These prices gets duly recorded and reported in the newspapers for the benefit of investing public. Besides, stock exchanges have defined rules and regulations to moderate price fluctuations to ensure continuity in buying and selling.

2.2.3 Mobilizing Surplus Savings

Stock exchange is an integral part of the capital market of a country. When people draw their savings and invest in shares (through an IPO or the issuance of new company shares of an already listed company), this leads mobilization of funds to help companies finance their organizations. They facilitate the process by which the savings from all parts of country gets channelized as investment into industrial and commercial undertakings financing their capital requirements. This promotes business activity resulting in stronger economic growth and higher productivity levels of firms.

2.2.4 Barometer of the Economy

Barometers are data points that represent trends or sentiment in the market or the general economy. The Standard & Poor's 500 Index and the Dow Jones Industrial Average (DJIA) serve as barometers of stock market performance, and are often used as barometers for the U.S. economy as a whole. It is quite common for a stock index or exchange to be used as a barometer for national economic health. Barometers can also be used to measure behavior at the consumer level.

For example, slowing sales at high-end restaurants while revenues at fast-food eateries

increase may be an indication that consumers are reigning in their spending.⁴

2.2.5 Mobility of Capital

Investing in other businesses require huge capital outlay whereas investing in shares is open to both the large and small stock investors. Stock exchanges furnish an open and continuous market for small investors and their savings that are invested in securities are converted into cash for reinvestment in other securities. Thus, stock exchanges provide mobility to capital and facilitate sound investment. Savings are encouraged when people come to invest in stock exchange.

2.2.6 Profit Sharing

As a result of stock market transactions, funds flow from the less profitable to more profitable enterprises. All type of stock investors whether they are individuals, professional stock investors, institutional investors earn capital gains through dividends and stock price increases. This enables them to share in the wealth of profitable businesses. Industries which have potentials of growth are able to attract the savings of people towards their ventures relatively more than those which have no such prospects. Thus, financial resources of the economy are allocated on a reasonable basis. Unprofitable and troubled businesses may result in capital losses for shareholders.

2.2.7 Speculation

The stock exchanges are also fashionable places for speculation and bring equilibrium in the prices of securities which are bought and sold by speculators. In a financial context, the terms "speculation" and "investment" are actually quite inter-related because "investment" means the act of placing money in a financial vehicle with the intent of producing returns over a period of time. Speculators generally buy securities in anticipation of rise in the prices. As a result of their buying, prices do not decline as low as might have been the case without their buying and vice versa hence regulating excessive price fluctuations.

Source: https://tzz.sac.net.cn/zqex/cnp/2j/201701/t20170124_130260.html

Source: <https://www.yuanliled.com/gupiaorumen/22868.html>

2.2.8 Liquidity

This is the most important function provided by the stock exchanges. The capital investments are generally long term and if shareholder wants their investment back, in a physical scenario, it will result in winding up the company and selling its assets to discharge the money. Investors usually prefer liquidity of their investment. The stock markets facilitate and provide that assurance to investors. These are markets which facilitate buying and selling of securities assuring liquidity of investments which goes to serve the investor's need.

2.2.9 Corporate Governance

As stock exchanges facilitate ownership of companies to be held by a wide and varied scope of owners, companies generally tend to improve management standards and efficiency to satisfy the demands of these shareholders. To safeguard the interest of investors more stringent rules are imposed by public stock exchanges and the government on public corporations when compared to privately owned enterprises. Every stock exchange defines its own rules and regulations for the control of operations of the exchange. Only members are allowed to deal in securities and make transactions. As the members have to transact their business strictly according to the rules, the investors' interests are safeguarded against dishonesty or malpractices. Traded public companies tend to have better management records than privately held companies.

Stock exchange provides a ready and continuous market for purchase and sale of securities. It provides a ready outlet for buying and selling of securities. Stock exchange also acts as an outlet/counter for the sale of listed securities. Facilitates evaluation of securities: Stock exchange is useful for the evaluation of industrial securities. This enables investors to know the true worth of their holdings at any time. Comparison of companies in the same industry is possible through stock exchange quotations (i.e. price list). Encourages capital formation: Stock exchange accelerates the process of capital formation. It creates the habit of saving, investing and risk taking among the investing class and converts their savings into profitable investment. It acts as an instrument of capital formation. In addition, it also acts as a channel for right (safe and profitable)

investment. Provides safety and security in dealings: Stock exchange provides safety, security and equity (justice) in dealings as transactions are conducted as per well-defined rules and regulations. The managing body of the exchange keeps control on the members. Fraudulent practices are also checked effectively. Due to various rules and regulations, stock exchange functions as the custodian of funds of genuine investors. Regulates company management: Listed companies have to comply with rules and regulations of concerned stock exchange and work under the vigilance (i.e. supervision) of stock exchange authorities. Facilitates public borrowing: Stock exchange serves as a platform for marketing Government securities. It enables government to raise public debt easily and quickly. Stock exchange provides a clearing house facility to members. It settles the transactions among the members quickly and with ease. The members have to pay or receive only the net dues (balance amounts) because of the clearing house facility. Healthy speculation, keeps the exchange active. Normal speculation is not dangerous but provides more business to the exchange. However, excessive speculation is undesirable as it is dangerous to investors & the growth of corporate sector. Stock exchange indicates the state of health of companies and the national economy. It acts as a barometer of the economic situation / conditions. Banks easily know the prices of quoted securities. They offer loans to customers against corporate securities. This gives convenience to the owners of securities.

3 Development of Stock Exchanges in China

China's stock market is an exchange where shares of Chinese companies are traded. It was founded 100 years ago. It's the second largest in the world after that of the United States. On June 20, 2017, Morgan Stanley Capital International announced it was adding China A-shares to its emerging market index. On June 1, 2018, it will name the 200-plus firms. That will increase China's stock market size by \$11 billion. The move will force asset managers who track the index to purchase China A-shares for their own portfolios.

From 1991 to 1993, it was a start-up phase. Under the premise of reforming the shareholding system and reforming the economic system, China began to gradually build its own securities market. The *Shanghai Stock Exchange* and *Shenzhen Stock Exchange* were established in December 1990 and July 1991. Since then, China's stock exchange market has begun to take shape to better allocate resources.

From 1994 to 1998, it was an expansion phase. At this stage, China's securities market began to conduct pilot operations nationwide. Relevant legal systems have been gradually established and improved, and the scale of market listing has continued to expand. However, the corresponding problems have gradually emerged. Speculation has become more and more serious, and frauds have generally occurred in listed companies. Economists call these problems "casinos."⁵

From 1999 to 2014, it was a stage of standardized development, and the securities market became more and more standardized at this stage. The stock issuance system has been adjusted since March 2001. The approval system replaced the original approval system. Regulators began to scrutinize the governance structure of listed companies more rigorously, prompting listed companies to pay more attention to the

Source:<https://zh.wikipedia.org/wiki/%E4%B8%8A%E6%B5%B7%E8%AF%81%E5%88%B8%E4%BA%A4%E6%98%93%E6%89%80>

rationality of their operations and the effective improvement of the company's quality. Which in turn allows investors to gain greater self-confidence._

China's stock market has been in a bear market during the period 2002-200_5, which is mainly due to the existence of equity splits. Therefore, the reform of split share structure has also begun, with a view to enabling the governance structure of listed companies to be effectively improved, so that the capital market can give full play to its own financing and resource allocation functions, and many companies have successfully listed. In 2006, the speed of the Shanghai and Shenzhen stock markets rebounded significantly, and the value reached by 2007 had already reached the highest level in history. Therefore, a big bull market appeared in 2006-2007.

Since 2008, it has been a pioneering and innovative stage. Due to the impact of the financial crisis in 2008, China's stock market has become very weak for a time. As a result, China began to implement the economic stimulus plan in 2009, and the bull market appeared in the Shanghai and Shenzhen stock markets. In April 2010, stock index futures officially appeared in China's securities market, and China began to formally appear in the financial derivatives market.

3.1 The Shanghai Stock Exchange

As the first stock exchange in the Mainland since the founding of the People's Republic of China, the Shanghai Stock Exchange (hereinafter referred to as the "Shanghai Stock Exchange") adopted a leading computer trading model as soon as it opened, and implemented paperless stock. These "new methods" at the time laid the foundation for the rapid development and expansion of the Shanghai Stock Exchange.

3.1.1 The Process of Listing

Beginning in May 1991, the Shanghai Stock Exchange recovered stocks in the hands of shareholders, and a paperless trading system was put into trial operation, building the world's most advanced trading system. When the Shanghai Stock Exchange opened, it was stipulated as "T + 4", which means that the transaction was completed today and the settlement was completed on the 4th day. According to the regulations that do not allow short-selling or short-selling, you must get money and

stocks before you can buy or sell. After the implementation of paperless stocks, the settlement period was shortened, which led to the subsequent "T + 1" and even "T + 0". According to the official website of the Shanghai Stock Exchange, at the beginning of the opening of the Shanghai Stock Exchange, there were a total of 30 listed products, including 8 stocks and 8 corporate bonds. As of the end of 2018, the number of listed companies in the Shanghai Stock Exchange reached 1,450, with a total market value of 27 trillion RMB, in 2018, the cumulative turnover of stocks was 40.3 trillion yuan, the average daily turnover was 165.9 billion yuan, and the total stock market financing was 611.4 billion yuan. The number of investors in the Shanghai Stock Exchange has reached 296.1 million.

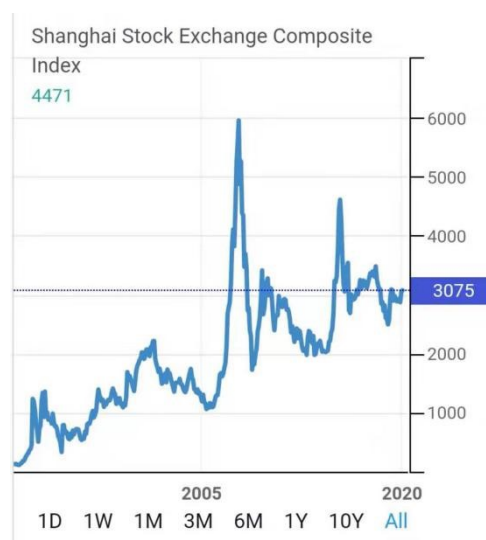
3.1.2 Enters a New Era

In November 2014, the Shanghai-Hong Kong Stock Connect was officially launched. The Shanghai and Hong Kong securities markets have successfully connected, and the internationalization of China's capital market has entered a new era. In June of this year, the 4th year of Shanghai-London Stock Connect was officially launched. Unlike the previous Shanghai-Hong Kong Stock Connect, the Shanghai-London Stock Connect has introduced breakthrough depositary receipts in the design of the interconnected system. This is another innovation of the interconnection model between domestic and overseas exchanges since the opening of the Shanghai-Hong Kong Stock Connect in 2014. In July this year, the Shanghai Stock Exchange Science and Technology Innovation Board officially “opened.” This day is only 259 days after the announcement of the establishment of the science and technology board and the trial registration system in November 2018. From scratch, from blueprints on paper to the official opening of the market, breakthroughs in the speed and institutional rules of the science and technology board have pushed China's capital market to a new level. China's efforts to open the capital market to more than that. In recent years, China's domestic exchanges, including the Shanghai Stock Exchange, have continued to innovate their systems, actively learn from international experience, and continue to accelerate opening to the outside world. With China's independent opening to the

outside world, China's capital market will certainly become an important force to promote the win-win development of economic and financial cooperation among countries, and it can be expected in the future.⁶

The Shanghai Stock Exchange Composite Index decreased 10 points since the beginning of 2020, according to trading on a contract for difference (CFD) that tracks this benchmark index from China. Historically, the China Shanghai Composite Stock Market Index reached a high of 6124.04 in October of 2007.

Graph 3.1 Shanghai Stock Exchange Composite Index in recent years



Source: <https://g.co/kgs/5dFCez>

3.2 The Shenzhen Stock Exchange

The Shenzhen Stock Exchange was born out of the reform and opening up, the construction of the special zone, and the "surname" debate, setting a precedent for the centralized trading of securities in New China. The functional role of the capital market has been constantly tested in the practice of reform, opening up, and modernization.

⁶ About the organizational structure of Shanghai Stock Exchange, see Annex 1

3.2.1 The Process of Listing

In January 1990, the Shenzhen Stock Exchange Preparatory Group was officially listed. On May 28, 1990, the Shenzhen Municipal Government announced an outlaw of illegal over-the-counter transactions, and then further decided to implement a stock price limit system and a transaction stamp tax, and also accelerated the Shenzhen Stock Exchange preparation process. On December 1, 1990, the Shenzhen Stock Exchange commenced trial operations. In December 1990, Shenzhen's "stock fever" aroused great concern of the Party Central Committee and the State Council. It conducted three investigations into the reform of the Shenzhen company's shareholding system and the securities market, and finally decided to retain the Shanghai and Shenzhen stock system and securities market pilots.

On April 16, 1991, the Shenzhen Stock Exchange was approved by the People's Bank of China. It officially opened on July 3 and held a press conference. In July 1991, the Shenzhen Stock Exchange sponsored the nation's first securities theory publication, the "Securities Market Herald", which was launched. In August 1994, the Shenzhen Stock Exchange took the lead in opening a two-way securities satellite network, breaking through the bottleneck of entrusted bidding and covering all regions in mainland China. At the beginning of the establishment, the Shenzhen Stock Exchange actively explored the internationalization of the securities market and product innovation. On February 28, 1992, "Shenzhen Glass B" was listed. In June 1995, the private placement of B-share convertible bonds in the Swiss market, the first direct financing in the international market. On June 30, 1993, the first pure B-share "Min Cankun B" was listed. On July 12, 1995, "China Merchants Bureau B" first listed in Singapore. In product innovation, on November 1, 1991, Yantian Port's key construction bonds were listed on the Shenzhen Stock Exchange. On November 5, 1992, Shenzhen Baoan Enterprise (Group) Co., Ltd. simultaneously issued 1992 warrants and 500 million yuan of convertible bonds. On September 12, 1994, the Shenzhen Stock Exchange launched the Treasury bond futures trading business, launching five series of 19 futures products in the first phase.

3.2.2 Start Standard Operation

By 1995, a multi-variety securities market pattern including A-shares, B-shares, bonds, warrants, and government bond futures has been initially formed. The Shenzhen Stock Exchange is facing the severe situation, adapting to system changes, advancing market service projects, strengthening market front-line supervision, realizing leapfrog growth from regional markets to national markets, and completing the key transition from experimental exploration to standardized operation. In December 1995, Zhu Rongji, then Deputy Prime Minister of the State Council, proposed the eight-character policy of "legal system, supervision, self-discipline, and standardization" as a general requirement for the development of the securities market. In March 1996, the Fourth Session of the Eighth National People's Congress called for further improvement and development of the securities market and the end of the experimental nature. On August 21 of the same year, the Securities Commission of the State Council issued the Measures for the Administration of Stock Exchanges. On July 2, 1997, the Shenzhen Stock Exchange was officially placed under the supervision and management of the China Securities Regulatory Commission. In March 1996, the Fourth Session of the Eighth National People's Congress called for further improvement and development of the securities market and the end of the experimental nature. On August 21 of the same year, the Securities Commission of the State Council issued the Measures for the Administration of Stock Exchanges.

3.2.3 Set up Multiple Sectors

On July 2, 1997, the Shenzhen Stock Exchange was officially placed under the supervision and management of the China Securities Regulatory Commission. In the 1990s, the rapid development of the new global economy and the accelerated adjustment of China's economic structure objectively required the capital market to perform its important functions of promoting corporate innovation and technological progress. The Shenzhen Stock Exchange has successively set up the SME Board and the GEM Board, opening up a path for the construction of a multi-level capital market system with Chinese characteristics. On January 15, 1999, the Shenzhen Stock Exchange submitted to the China Securities Regulatory Commission the "Project

Report on the Study of Growth Board Market Solutions" and its implementation plan. In August 2000, with the consent of the State Council, the China Securities Regulatory Commission decided that the Shenzhen Stock Exchange should assume the preparatory task of the GEM market, and at the same time stopped listing of new companies on the main board of the Shenzhen Stock Exchange.

In August 2000, the Shenzhen Stock Exchange set up a leading group for the preparation of the Growth Enterprise Market, and the preparation work for the Growth Enterprise Market was fully launched. The Shenzhen Stock Exchange has fully mobilized and carefully organized to do a lot of basic work for the construction of the GEM market in terms of regulations, technical systems, corporate cultivation, and talent reserves. On October 26, 2000, the first GEM training course for listed companies was held. In April 2001, a training center for entrepreneurial enterprises was established. In the second half of 2001, the global technology stock bubble burst, overseas GEM markets have failed or entered a trough, and the construction of the GEM market in China has been questioned. Affected by many factors, the launch of the GEM was suspended. Facing difficulties and twists and turns, the Shenzhen Stock Exchange actively explored, reviewed the situation, put forward the strategic thinking of step-by-step promotion of the GEM, and gradually achieved broad consensus, paving the way for the construction of a multi-level capital market system.

On May 17, 2004, with the consent of the State Council, the China Securities Regulatory Commission approved the establishment of a SME section on the Shenzhen Stock Exchange. On May 27, the SME Board was launched. On June 25, the first eight companies of the SME board went public. The standardized development of the SME board has become one of the most successful SME markets in the world. The successful practice of the SME board has opened the way for the launch of the GEM. On April 29, 2005, the China Securities Regulatory Commission officially launched the share reform. At the end of 2006, the share reform of listed companies on the Shenzhen Stock Exchange took the lead in basically completing the reform. The reform of the split share structure, the standardized governance of securities companies,

and the comprehensive governance of listed companies have resolved the major obstacles that have long plagued the development of the capital market, and also created conditions for the launch of the GEM. On October 23, 2009, the GEM was officially launched. On October 30, the first batch of 28 GEM listed companies were listed.

3.2.4 Construction Goals

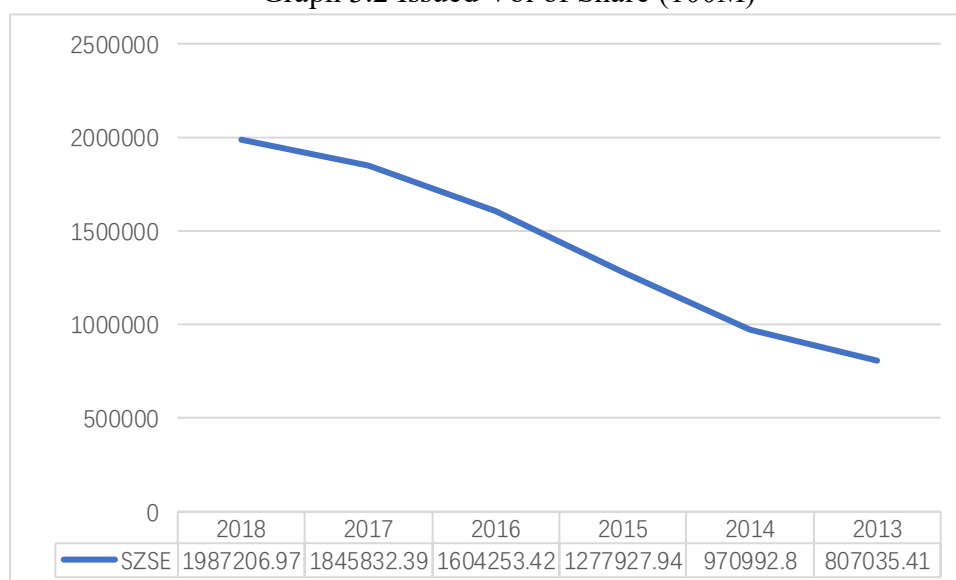
The launch of the GEM marked the initial establishment of a multi-level capital market architecture. In the new historical stage, the Shenzhen Stock Exchange will continue to take service as a support to the Chinese economy as its responsibility, make every effort to improve the inclusiveness and transparency of the multi-level capital market, and strive to build itself into the world's most distinctive stock exchange.

First, we must comprehensively improve the inclusiveness of multi-level capital markets. Connect with key areas and weak links in the real economy, serve more companies at different stages of growth, expand the coverage of multi-level capital markets, give play to the support, guidance and leadership of the capital market, optimize resource allocation, and serve the country's long-term development strategy. To meet the diversified wealth management needs of the society, serve more different types of market participants, improve risk management tools and product trading platforms, give play to the market organization and innovative service functions of the exchange, and improve the depth and quality of the capital market.

Second, we must comprehensively improve the transparency of multi-level capital markets. Improve information disclosure supervision, increase the transparency of listed companies, build a differentiated supervision system centered on integrity constraints, establish and improve investor service and protection working mechanisms, and give full play to the market's own binding power. Improve market transaction supervision, increase market operation transparency, realize the effective disclosure of transaction information, regulatory rules, and regulatory measures, promote the orderly operation of the market, and participants' due diligence, and greatly improve the efficiency of market risk pricing and allocation.

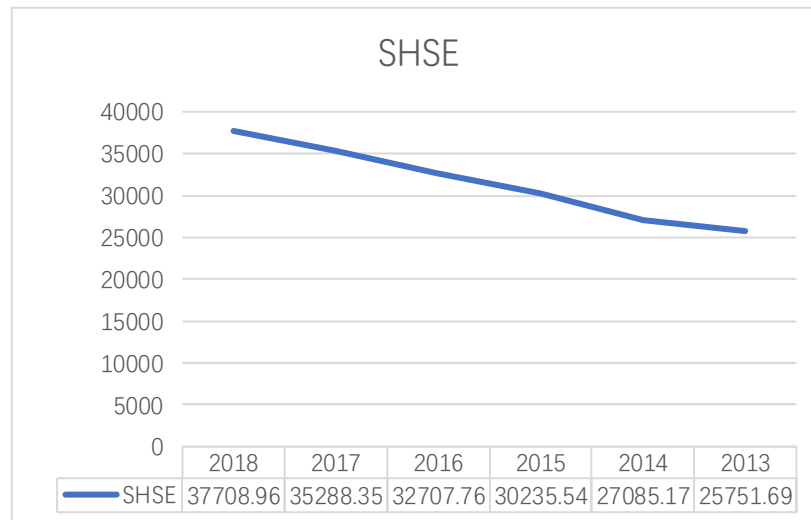
Third, we must comprehensively enhance competitiveness and build the world's most distinctive exchange. Based on independent research and development of core systems, improve the level of technological development and management, and build a safe, efficient, autonomous, and reliable comprehensive technical support service platform centered on a new generation of high-availability, high-scalability, and high-performance capacity trading systems. Based on the realization of long-term development strategy, improve the level of governance and management, adapt to China's reform and opening up and the requirements of economic and social development in the new period, build a stock exchange based on its own distinctive characteristics, and then have core competitiveness in the world.

Graph 3.2 Issued Vol of Share (100M)



Source: SZSE Index, <http://www.szse.cn/market/periodical/year/index.html>

Graph 3.3 Issued Vol of Share (100M)⁷



Source: SSE Index,

<http://www.sse.com.cn/home/search/?webswd=%E7%BB%9F%E8%AE%A1%E5%B9%B4%E9%89%B4>

<http://www.szse.cn/market/periodical/year/index.html>

3.3 The Hong Kong Stock Exchange

Hong Kong has a long history of securities trading. It has been around since the early days of Hong Kong's opening in the 19th century. The earliest securities trading in Hong Kong dates back to 1866. Hong Kong's first stock exchange, the Hong Kong Stockbrokers Association, was established in 1891.

In 1914, it was renamed the Hong Kong Stock Exchange. In 1921, Hong Kong established a second stock exchange, the Hong Kong Securities Brokers Association. In 1947, the two exchanges merged into the Hong Kong Stock Exchange Limited. By the late 1960s, an original Hong Kong exchange could not meet the needs of the prosperity and development of the stock market. After 1969, three stock exchanges in the Far East, Gold, Silver and Kowloon were successively established, and the Hong Kong stock market entered the so-called "Four Meetings era" where four exchanges coexisted. The original four Hong Kong exchanges and their establishment time: The

Source: <https://zh.wikipedia.org/wiki/%E9%A6%99%E6%B8%AF%E4%BA%A4%E6%98%93%E6%89%80>

Hong Kong Stock Exchange was established in 1947, and the Far East Stock Exchange was established on December 17, 1969. The Gold and Silver Stock Exchange was founded on September 15, 1971, and the Kowloon Stock Exchange was founded in 1972. At that time, the Hong Kong Stock Exchange was mainly managed by the British, and the listed companies were mostly British-funded enterprises. At the end of the 1960s, Hong Kong's economy took off, and the demand for Chinese-funded companies to raise funds increased, which led to the opening of more exchanges owned and managed by Chinese capital founded.

On March 27, 1986, the four exchanges formally merged to form the Hong Kong Stock Exchange. On April 2, 1986, the Stock Exchange opened and began to enjoy the exclusive right to establish, operate and maintain a securities market in Hong Kong. The Stock Exchange became operational and became the only stock exchange in Hong Kong. The Hong Kong stock market has entered a new era. The trading floor of the Stock Exchange is located at the Hong Kong Exchange Square and uses a computer-assisted trading system for securities trading.

On June 27, 2000, the Hong Kong Stock Exchange (HKEx: 00388) was listed on the Stock Exchange by way of introduction. On April 1, 2012, it became the first exchange approved to set up a "data station" in Shanghai in the Mainland, which will provide the fastest and latest Hong Kong stock quotes directly to the Mainland market.

4 Development of Stock Exchanges in the USA

The US stock exchanges have developed relatively early. The US stock exchanges mainly include the New York Stock Exchange and the NASDAQ Stock Exchange.

4.1 NYSE

The earliest recorded organization of securities trading in New York among brokers⁸ directly dealing with each other can be traced to the Buttonwood Agreement. Previously, securities exchange had been intermediated by the auctioneers, who also conducted more mundane auctions of commodities such as wheat and tobacco. On May 17, 1792, twenty four brokers signed the Buttonwood Agreement, which set a floor commission rate charged to clients and bound the signers to give preference to the other signers in securities sales. The earliest securities traded were mostly governmental securities such as War Bonds from the Revolutionary War and First Bank of the United States stock, although Bank of New York stock was a non-governmental security traded in the early days. The Bank of North America, along with the First Bank of the United States and the Bank of New York, were the first shares traded on the New York Stock Exchange.

In 1817, the stockbrokers of New York, operating under the Buttonwood Agreement, instituted new reforms and reorganized. After sending a delegation to Philadelphia to observe the organization of their board of brokers, restrictions on manipulative trading were adopted, as well as formal organs of governance. After re-forming as the New York Stock and Exchange Board, the broker organization began renting out space exclusively for securities trading, which previously had been taking place at the Tontine

Source:

<https://zh.wikipedia.org/wiki/%E7%BA%BD%E7%BA%A6%E8%AF%81%E5%88%B8%E4%BA%A4%E6%98%93%E6%89%80>

Coffee House. Several locations were used between 1817 and 1865, when the present location was adopted.

The invention of the electrical telegraph consolidated markets and New York's market rose to dominance over Philadelphia after weathering some market panics better than other alternatives. The Open Board of Stock Brokers was established in 1864 as a competitor to the NYSE. With 354 members, the Open Board of Stock Brokers rivaled the NYSE in membership (which had 533) "because it used a more modern, continuous trading system superior to the NYSE's twice-daily call sessions". The Open Board of Stock Brokers merged with the NYSE in 1869. Robert Wright of Bloomberg writes that the merger increased the NYSE's members as well as trading volume, as "several dozen regional exchanges were also competing with the NYSE for customers. Buyers, sellers and dealers all wanted to complete transactions as quickly and cheaply as technologically possible and that meant finding the markets with the most trading, or the greatest liquidity in today's parlance. Minimizing competition was essential to keep a large number of orders flowing, and the merger helped the NYSE maintain its reputation for providing superior liquidity." The Civil War greatly stimulated speculative securities trading in New York. By 1869, membership had to be capped, and has been sporadically increased since. The latter half of the nineteenth century saw rapid growth in securities trading.

Securities trade in the latter nineteenth and early twentieth centuries was prone to panics and crashes. Government regulation of securities trading was eventually seen as necessary, with arguably the most dramatic changes occurring in the 1930s after a major stock market crash precipitated the Great Depression.

The Stock Exchange Luncheon Club was situated on the seventh floor from 1898 until its closure in 2006.

The main building, located at 18 Broad Street, between the corners of Wall Street

⁹and Exchange Place, was designated a National Historic Landmark in 1978, as was the 11 Wall Street building.

On April 21, 2005, the NYSE announced its plans to merge with Archipelago in a deal intended to reorganize the NYSE as a publicly traded company. NYSE's governing board voted to merge with rival Archipelago on December 6, 2005, and became a for-profit, public company. It began trading under the name NYSE Group on March 8, 2006. On April 4, 2007, the NYSE Group completed its merger with Euronext, the European combined stock market, thus forming NYSE Euronext, the first transatlantic stock exchange.

Wall Street is the leading US money center for international financial activities and the foremost US location for the conduct of wholesale financial services. "It comprises a matrix of wholesale financial sectors, financial markets, financial institutions, and financial industry firms" (Robert, 2002). The principal sectors are securities industry, commercial banking, asset management, and insurance.

Prior to the acquisition of NYSE Euronext by the ICE in 2013, Marsh Carter was the Chairman of the NYSE and the CEO was Duncan Niederauer. Currently, the chairman is Jeffrey Sprecher. In 2016, NYSE owner Intercontinental Exchange Inc. earned \$419 million in listings-related revenues.

4.2 Nasdaq

Nasdaq stock exchange is an electronic stock exchange in the United States, founded in 1971. The market allows market makers of promissory notes and stocks to trade directly through the telephone or Internet without being limited to the trading hall, and the trading content is mostly related to new technologies, especially computers, which is the first electronic securities trading market in the world.

Generally speaking, the companies listed on Nasdaq are mainly high-tech companies, including Microsoft, Apple, Intel, Dell, Cisco, etc. On May 18, 2012,

Facebook raised about \$16 billion by listing on Nasdaq, becoming the second largest U.S. IPO after Visa (about \$17.9 billion) in 2008.

Although Nasdaq is an electronic stock exchange market, it still has a representative trading center, which is located at No. 4 Times Square next to the New York Times Square (the building is also often called "caterpillar building"). No. 4 Times Square does not have all kinds of hardware facilities commonly used by stock exchanges. Instead, it is a large-scale studio, with high-tech projection screens and reporters from major financial news and television stations in Europe and the United States stationed for real-time market reports.¹⁰

On April 1, 2013, Nasdaq invested US \$750 million (about HK \$5.85 billion) in cash to acquire Speed, an e-bond trading platform, from BGC partners, a currency broker, so that the city could enter into daily trading volume of 5 for the first time, In the \$0.0 billion market, if the revenue meets the target, Nasdaq will issue about 15 million ordinary shares worth \$484 million in the next 15 years, bringing the potential value of the transaction to \$1.23 billion.

Nasdaq old trademark

When Nasdaq began trading on February 8, 1971, it was an electronic stock market. and was founded by the National Association of Securities Dealers. It separated during series of transactions in 2000 and 2001. Owned and operated by Nasdaq OMX group, its shares were listed on its own stock exchange on July 2, 2002, with the stock code of Nasdaq: NDAQ. Nasdaq is the most typical multi market maker trading system, which is opposite to the special dealer system of New York Stock Exchange. The superiority of market maker trading system promotes the rapid development of Nasdaq.

5 Comparison of Selected Stock Exchanges

In this part of thesis we will compare Shanghai Stock Exchange, Shenzhen Stock Exchange, Hong Kong Stock Exchange, Nasdaq Stock Exchange and New York Stock Exchange in terms of history, way of trading, types of markets, regulation, IPO, market capitalization and main indexes.

5.1 History

We will first compare the history of income from the Shanghai Stock Exchange,¹¹Shenzhen Stock Exchange, Hong Kong Stock Exchange, Nasdaq and New York Stock Exchange.

Shanghai Stock Exchange was founded on November 26, 1990, Shenzhen Stock Exchange on December 1, 1990, Hong Kong Stock Exchange on April 2, 1986, New York Stock Exchange on March 8, 1817 and Nasdaq Stock Exchange on February 4, 1971. From the time of its establishment, the stock exchange in the United States was established much earlier than that in China, with a much longer history. The New York Stock Exchange closed the stock exchange due to World War I, the Dow Jones index plummeted, hurricane and other reasons, but eventually restored investor confidence and reopened the stock exchange. On March 10, 2000, the Nasdaq composite index peaked at 5132.52, down 78% over the next 30 months from the same period last year. In 2010, Nasdaq merged with OMX, the leading exchange operator in the Nordic countries, expanding its global business. China's stock exchanges launched SME board in 2004 and gem in 2009. Generally speaking, China's stock exchange is still at the stage of development. Compared with the American stock exchange, China's stock market will be more vulnerable.

5.2 Way of trading

Each country has its own regulations regarding the trading methods of its own national stock exchanges. The trading methods of Chinese stock exchanges are roughly

Source: <http://www.sse.com.cn/services/overview/>

the same, but there are still differences. The trading methods of Stark Stock Exchange and New York Stock Exchange are compared.

The trading hours of Shanghai stock exchange are from Monday to Friday every week. In the morning, before listing, the call time is from 9:15 to 9:25, and the continuous call time is from 9:30 to 11:30. Afternoon is the after-sale market, 13:00-15:00 is the continuous bidding time, and Saturday, Sunday and the closing day announced by Shanghai Stock Exchange are closed days.

The trading hours of Shenzhen Stock Exchange are Monday to Friday every week. Morning is the pre market, 9:15-9:25 is the opening call time, 9:30-11:30 is the continuous auction time. After sales in the afternoon, 13:00-14:57 is the continuous bidding time, and 14:57-15:00 is the end bidding time. The market is closed on Saturday, Sunday and the closed day announced by Shenzhen Stock Exchange. The trading time of the agreed block trading method is 9:15-11:30 and 13:00-15:30 of the trading day. If the bulk trading mode of afterhours pricing is adopted, the acceptance and declaration time is 15:05-15:30 on each trading day. The transaction confirmation time of the agreement block trade is 15:00-15:30 on each trading day; the transaction confirmation time of the company bond agreement block trade is 9:15-11:30 and 13:00-15:30 on each trading day.

From March 5, 2012, the trading time of Hong Kong stock will be further adjusted to 9:30-12:00 a.m., 13:00-16:00 p.m., and the trading time of the whole day will be further extended to 5.5 hours. On April 8, 2013, the last trading period of futures was launched. At that time, the trading hours of Hang Seng Index and H-share index futures will be from 17:00 to 23:00 Hong Kong time. Hang Seng Index and H-share index futures can be traded during the normal trading hours of 9:15-12:00 Hong Kong time and 13:00-16:15 Hong Kong time.

The trading mode of New York Stock Exchange is the same as the traditional market, and the way of bargaining is different from the automatic matching of computers in Chinese stocks. According to the trading conditions opened by customers,

securities brokers will openly look for buyers and sellers in the trading hall, and then bargain. The trading hours of the New York Stock Exchange and Nasdaq are 9:30-16:00 (local time) of the working day and the normal off market day.

The trading hours of Shanghai Stock Exchange and Shenzhen Stock Exchange are 4 hours on the trading day, Hong Kong Stock Exchange 5.5 hours on the trading day, and NYSE and Nasdaq 6.5 hours on the trading day. China's stock exchanges differ in the time of continuous bidding, bulk trading, acceptance and final trading. The Chinese stock exchange is closed for an hour at noon, but the trading hours of the American stock exchange are continuous.

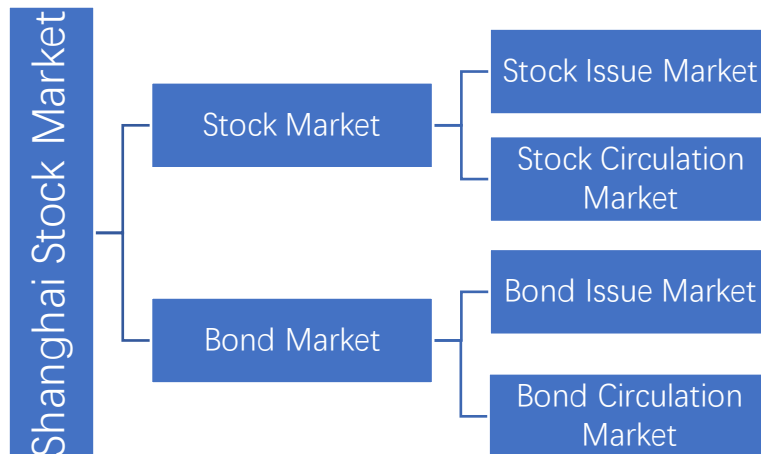
5.3 Types of markets

We will compare the market types of Shanghai Stock Exchange, Shanghai Stock Exchange, Hong Kong Stock Exchange, New York Stock Exchange and Nasdaq.

Shanghai stock market can be divided into stock market and bond market according to trading objects. The stock market is the place where all kinds of stocks are issued and traded. According to its basic functions, it can be divided into stock issuing market and stock circulating market. Bond market is the place where bonds are issued and traded. It can also be divided into bond issuance market and bond circulation market. In addition, there are fund market, warrant market, etc.

Shanghai stock market can be divided into exchange market, over-the-counter market and computer market according to the trading place. The exchange market is the stock exchange of stock exchange. Exchange transactions must comply with the state securities law. Organized and standardized securities trading. The over-the-counter market refers to the securities exchange market that does not exist in the form of a stock exchange. OTC trading generally adopts the price negotiated by securities firms. The computer trading market refers to the special market for securities trading through computer terminals, which is essentially the electronic computer network market for securities trading. There is no need for brokers to trade securities in this market. Investors can buy and sell directly.

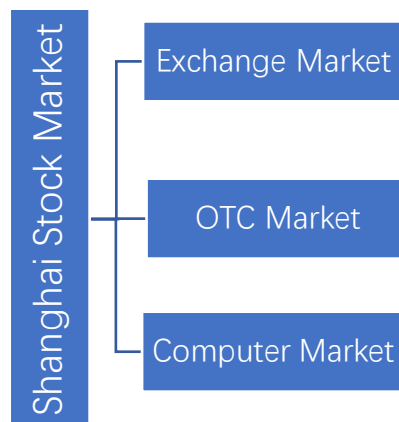
Graph 5.1 Shanghai Market by Trading Partner



Source:

<https://baike.baidu.com/item/%E4%B8%8A%E6%B5%B7%E8%AF%81%E5%88%B8%E4%BA%A4%E6%98%93%E6%89%80>

Graph 5.2 Shanghai Market by Trading Place

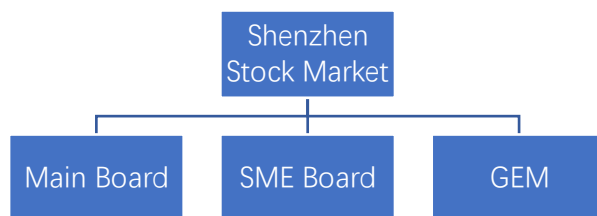


Source: www.sse.com.cn

Shenzhen Stock Exchange has established a multi-level capital market system of differentiated development of main board, SME board and growth enterprise board. The main board of Shenzhen stock exchange continued to improve. In order to prepare for gem, the main board market of Shenzhen Stock Exchange began to stop listing new companies in 2000. By the end of April 2014, the total market value of small and medium-sized board was 4.17 trillion yuan, which has become an important part of the

characteristics of China's capital market. Gem was established in October 2009, and is positioned to serve independent innovation enterprises and other growth oriented entrepreneurial enterprises. By the end of April 2014, there were 379 GEM listed companies. By the end of April 2014, the total share capital of gem was 75.88 billion shares, with a total market value of 1.88 trillion yuan. In the global service entrepreneurship and innovation market, the market value is second only to Nasdaq. If Nasdaq only calculates the capital market sector, then China's gem scale ranks first in the world.

Graph 5.3 Shenzhen Stock Market Level Market



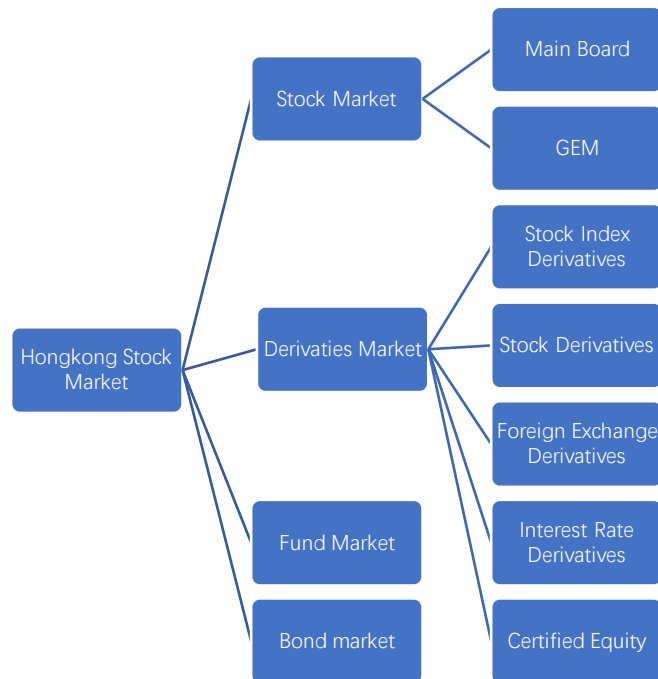
Source: www.szse.com.cn, own processing

Bond market is also an important part of Shenzhen Stock Market. As of the end of April 2014, there were 442 bonds listed on the Shenzhen Stock Exchange, with a total face value of 215.9 billion yuan. In order to broaden the financing channels of unlisted small and medium-sized micro enterprises, the pilot project of private placement bonds for small and medium-sized enterprises was launched in 2012, 200 of which have been filed, with a total scale of 27 billion yuan. By the end of 2013, Shenzhen Stock Exchange had 280 listed funds, accounting for 83.33% of the total trading volume of Shenzhen and Shanghai Stock Exchanges, and launched cross market CSI 300 ETFs and cross-border Hong Kong Hang Seng ETFs.

Hong Kong market includes stock market, derivative market, fund market and bond market. The main component of the Hong Kong stock market is the stock market, which is divided into the main board market and the growth enterprise market. There are many kinds of derivatives in Hong Kong market, which can be divided into five categories:

stock index derivatives, stock derivatives, foreign exchange derivatives, interest rate derivatives and certified equity. Almost all the funds registered in Hong Kong are open-end funds. According to the Hong Kong Monetary Authority, dragon bonds are the most representative in the foreign currency bond market.

Graph 5.4 Division of Hongkong Stock Market



Source: SSE.

<https://baike.baidu.com/item/%E9%A6%99%E6%B8%AF%E8%AF%81%E5%88%B8%E5%B8%82%E5%9C%BA>.

Nasdaq and NYSE are the two largest stock exchanges in the world, providing a platform for securities trading. Although they have many similarities in scale and purpose, they are very different markets. The main difference between Nasdaq and NYSE is in their market. Nasdaq is a dealer market. Participants trade through dealers, not directly. NYSE is a bidding market, and individuals can trade on the basis of bidding. The mode adopted by Nasdaq and NYSE is that the dealer market and the bidding market represent the fundamental difference of their operation mode. The competitive market operated by NYSE is a system based on the simultaneous competitive bidding of buyers and sellers. The price of a stock transaction reflects the highest price the buyer

is willing to pay and the lowest price the seller is willing to accept. The matching bids and quotations are then matched to the orders executed by the franchisee. However, the dealer market operated by Nasdaq is a market type in which multiple dealers announce that they will buy or sell a stock price. In a dealer market, a dealer is designated as a market maker, i.e. a member company or market participant, such as a brokerage company or a bank, that actively trades shares on behalf of a trader. Market makers can make the process of matching buyers and sellers faster, maintain liquidity and ensure the efficiency of the transaction process. Theoretically, the difference between the two roles lies in that the market makers of Nasdaq actually create a market, while the exclusive brokers of NYSE only facilitate the market. However, both roles have a common goal, which is to create a smooth and orderly market for customers.

The Hong Kong Stock Exchange also has many market types.

5.4 Regulation

Each country will surely have all relevant regulations and requirements for securities trading, and the stock exchange will also designate relevant laws and regulations for trading and listing.

According to the rules of stock code distribution of Shanghai Stock Exchange issued on August 10, 2009, the stock code of Shanghai stock exchange adopts 6 Arabic numerals, and the value range is 000000-999999. The first three digits of the six digit code are the securities category identification area, and the last three digits of the six digit code are the sequential coding area. Shanghai Stock Exchange implements the designated trading system, that is, investors can only conduct entrusted trading in designated securities companies. If they want to transfer to other securities companies, they must first cancel the designated trading in the original securities companies. Through the trading system, Shanghai Stock Exchange provides investors with a way to participate in the voting of the general meeting of shareholders, so that shareholders who are unable to attend the meeting can also vote and exercise their rights.

The Shenzhen Stock Exchange is the organizer and regulator of the market. It is the core duty of the exchange to supervise the market. Trading rules, listing rules and member management rules constitute the cornerstone of the first-line supervision of the exchange. Shenzhen Stock Exchange specially stipulates that the individual investors who participate in the stock buying and trading during the delisting consolidation period must have more than two years of stock trading experience, and the average securities assets of the 20 trading days before the application for opening authority shall not be less than 500000 yuan. The gem trading place of Shenzhen Stock Exchange consists of trading host, trading seat and relevant communication system.

The important rules for securities trading in Hong Kong stock exchange are as follows:

Every kind of securities traded on the exchange are traded at a designated "price point", which represents the minimum fluctuation range of securities and is related to the price range of securities. The exchange's price list sets the price range from HK \$0.01-0.25 (HK \$0.001) to HK \$1000-9995 (HK \$2.50) per share. When the price of a stock rises or falls to another price range, its price will also change. According to the exchange rules, in order to ensure the price continuity of the two adjacent trading days and prevent the market from violent fluctuation during the opening, the "opening quotation" shall be carried out in accordance with the procedures: the opening quotation rules shall be used for the first trading order entering the trading system on each trading day. The price of the first order shall not exceed the upper and lower four prices of the previous day's closing market price.

NYSE Regulation ("NYSER") is responsible for monitoring activities on the NYSE's equities, options, and bonds markets – i.e., the New York Stock Exchange LLC (equities and bonds), NYSE Arca, Inc. (equities and options), NYSE American LLC (equities and options), NYSE National, Inc. (equities), and NYSE Chicago, Inc.

¹²(equities) (collectively, the “NYSE Exchanges”) – and for addressing non-compliance with the NYSE Exchanges’ rules and federal securities laws. NYSEER enforces both the NYSE Exchanges’ and their members’ compliance with NYSE Exchange rules and applicable federal securities requirements. It also monitors and enforces listed companies’ compliance with applicable listing standards of the NYSE Exchanges. By performing these duties, NYSEER supports the NYSE Exchanges’ efforts to promote just and equitable principles of trade, encourage free and open markets, and protect investors and the public interest. Many of these regulatory functions are performed directly by NYSEER; others are performed by FINRA or other self-regulatory organizations pursuant to a regulatory services agreement, national market system plans, or other arrangements.

Nasdaq has its own market maker system. They are independent stock dealers who buy and sell a certain stock for investors. This institutional arrangement is particularly important for those stocks with low market value and few transactions. These market makers are members of NASD, which is consistent with the way TSE sponsors are formed. For every Nasdaq listed stock, at least two or more market makers should quote for its stock. Some large-scale and active market makers can often reach 40-45. These market makers include Merrill Lynch, Goldman Sachs, Salomon Brothers and other world's top investment banks. Nasdaq is now increasingly trying to use this market maker system to enable listed companies' shares to be traded at the optimal price, while protecting the interests of investors.

5.5 IPO

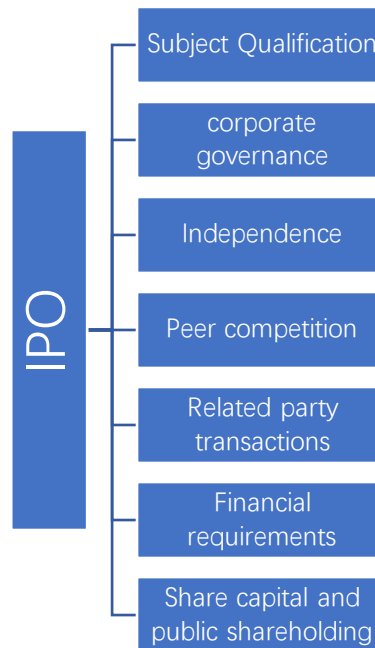
The requirements for listing in each country are different, and the listing requirements for different stock exchanges in a country are also different.

We will compare the IPO on the Shanghai Stock Exchange, the Shenzhen Stock Exchange, the Hong Kong Stock Exchange, the New York Stock Exchange. And the

Nasdaq Stock Exchange.

There are the following requirements for listing on Shanghai Stock Exchange.

Graph 5.5 IPO in Shanghai Stock Exchange



Source: SSE. www.sse.com.cn.

An issuer applying for listing its shares on this exchange after the initial public offering of shares on the Shanghai Stock Exchange shall meet the following conditions:

- (1) The shares have been approved by the CSRC for public issuance;
- (2) The total share capital of the company shall not be less than RMB 50 million;
- (3) The number of shares publicly issued shall be more than 25% of the total number of shares of the company; if the total number of shares of the company exceeds 400 million yuan, the proportion of shares publicly issued shall be more than 10%;
- (4) The company has no major illegal acts in the past three years, and there is no false record in its financial and accounting reports.

A GEM company's initial public offering of shares for listing on the Shenzhen Stock Exchange shall meet the following conditions:

- (1) The shares have been publicly issued;
- (2) The total share capital of the company is not less than 30 million yuan;
- (3) The publicly issued shares reach more than 25% of the company's total shares; if the company's total share capital exceeds 400 million yuan, the proportion of publicly issued shares is more than 10%;
- (4) The number of shareholders of the company is not less than 200;
- (5) The company has not committed any major illegal acts in the past three years, and the financial and accounting reports have no false records;
- (6) Other conditions required by Shenzhen Stock Exchange.

The conditions for listing on the Hong Kong stock exchange are as follows.

With a market value of less than HK \$10 billion, the public owns at least 25% of the shares. The market value of HK \$10 billion or more is at the discretion of the exchange, but generally not less than 10% or 10% - 25%. Each issue of HK \$1 million shall be held by not less than 3 persons and at least 100 persons at a time. The expected market value at the time of listing shall not be less than HK \$100 million. The income in the latest year shall not be less than HK \$20 million, and the accumulated income in the previous two years shall not be less than HK \$30 million.

The conditions for listing on the New York Stock Exchange are stricter.

If U.S. companies are listed, the pretax profit of the company in the latest year is required to be no less than \$2.5 million, and the public owns no less than 100000 shares of the company. The company has more than 2000 investors and more than 100 shares. And the issuance amount of common shares shall not be less than US \$40 million at market price, and the net tangible assets of the company shall not be less than US \$40 million.

If non-U.S. companies are listed, the listing conditions are more stringent than domestic enterprises, mainly including:

1. The minimum number of shares to be publicly issued and the business records of the company is: more than 2000 shareholders (each shareholder holds more than 100 shares); 2200 shareholders (the average trading volume in the six months before listing is 100000 shares); 500 shareholders (the average trading volume in the 12 months before listing is 1 million shares); at least 1.1 million shares are owned by the market investors (1.1 million shares to be publicly issued).

2. The minimum market value of public shares is US \$40 million; the net tangible assets are US \$40 million.

3. The profit requires that the pre tax income of the two years before listing is 2 million US dollars per year, and the pre tax income of the last year is 2.5 million US dollars; or the total pre tax income of the three years must be 6.5 million US dollars, and the minimum pre tax income of the last year is 4.5 million US dollars; or the total market value of the accounting year before listing is not less than 500 million US dollars, and the income of the company reaches 200 million US dollars: the net income after three-year adjustment is combined \$25 million (must be a positive number in the annual report).

4. The types of listed enterprises are mainly for mature enterprises.

5. Adopt accounting standards generally accepted accounting principles of the United States.

6. There is no specific regulation on the company registration and business location.

7. The company's disclosure of business information shall comply with the exchange's annual report, quarterly report and interim report system.

8. Other factors have a number of requirements for the management and operation of the company; detailed description of the relative stability of the industry to which the company belongs, the position of the company in the industry, and the market situation

of the company's products.

If you are listed on Nasdaq, you need to meet one of the following conditions:

(1) Shareholders' equity (net assets of the company) shall not be less than US \$15 million, and the pre tax operating income of at least one year in the last three years shall not be less than US \$1 million.

(2) Shareholders' equity (net assets of the company) shall not be less than US \$30 million. More than two years of business record.

(3) The market value of shares in circulation on NASDAQ shall not be less than US \$75 million, or the total assets of the company and the total income of the year shall not be less than US \$75 million.

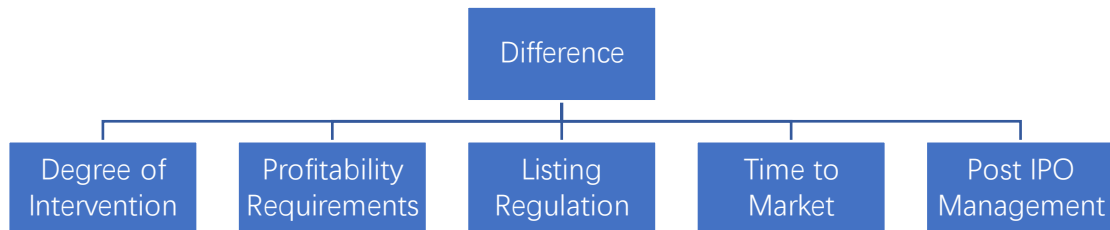
The annual financial statements of each year must be submitted to the CSRC and the shareholders of the company for future reference.

The case must involve at least three market makers (each registered market maker must be able to buy and sell more than 100 shares at the normal trading price and must return all trading prices and volumes to the National Association of securities dealers within 90 seconds of each trading).

NASDAQ is the market for growth companies. There are more than 1700 stocks listed on the NASDAQ small capital market. As the listing standard of NASDAQ's small-scale capital, although the financial index is not as strict as the national market listing standard, its common management standard is the same. If the opening price is more than \$4, it must be maintained for 90 days and then no less than \$1. Otherwise, it will be downgraded to the OTC Bulletin Board. Otherwise, if the company operates well and its share price rises to more than \$5, it can apply for trading in the national market.

Generally speaking, there are several differences between the listing on Chinese stock exchange and the listing on American stock exchange.

Graph 5.6 Difference in Listing Companies



Source: www.finance.sina.cn.

Degree of Intervention: In the case of China's listing, the CSRC and the exchange intervene in the operation of enterprises. Even if the board of directors and the shareholders' meeting of enterprises approve some trading behaviors, they still need the consent of the CSRC and the exchange. So compared with this, American listed companies have more autonomy.

Profitability Requirements: China's listing has higher requirements on corporate profitability. Some emerging industries, such as Internet enterprises and enterprises providing solutions, even if they have sustained profitability, may also have doubts about whether the profitability model can be sustained, including the historical evolution of enterprises and the problems unrelated to profitability in history will also be included in the focus. As a result, problems that do not exist in the U.S. listing may lead to the failure of listing in China.

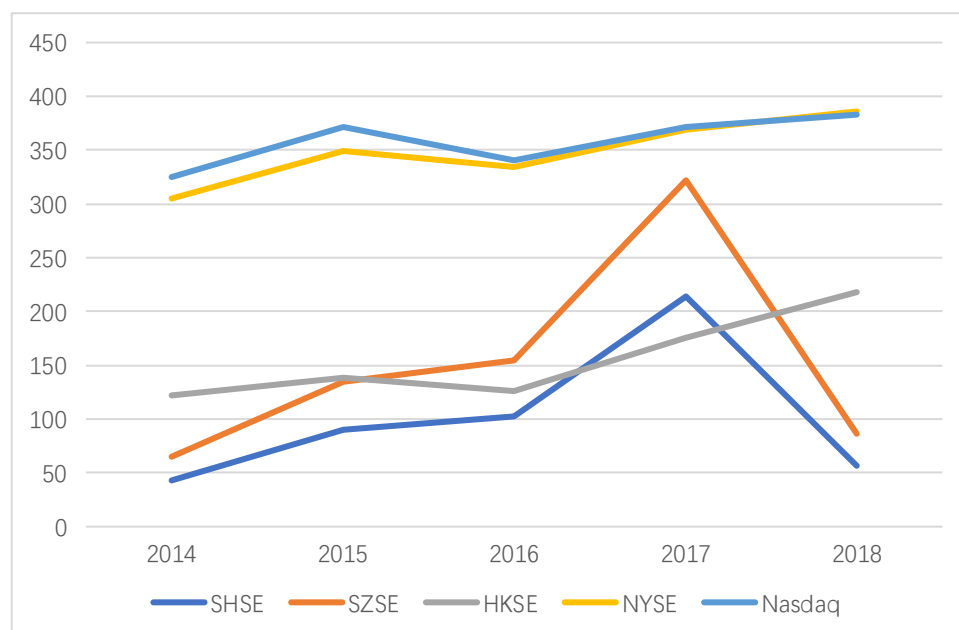
Listing Regulation: China's listing is an approval system. All listed enterprises need to

go through the verification of China Securities Regulatory Commission. Many listing regulations are not easy to grasp, and the threshold for enterprises to be listed is high. Listing in the United States is a registration system, with clear legal standards. As long as it meets the listing hard indicators and registers with relevant departments, it can be listed.

Time to Market: China's IPO usually takes 1-3 years, including the coaching period, or even longer. The time of listing in the United States is relatively fast. If the backdoor listing is about 9 months, it will be successful.

Post IPO Management: In the United States, the late management of listed companies will be very strict, and if mistakes are made, there will be very serious consequences; although China's listing is very strict, the late management is relatively loose.

Graph 5.7 Number of New Listed Companies for the year end



Source: SSE, SZSE, HKSE, NYSE, Nasdaq,

<http://www.sse.com.cn/home/search/?webswd=%E7%BB%9F%E8%AE%A1%E5%B9%B4%E9%89%B4>

<http://www.szse.cn/market/periodical/year/index.html>

https://www.hkex.com.hk/Global/HKEX-Market-Search-Result?sc_lang=zh-

<HK&mode=basic&q=annual%20reports&u=Market%20Data>

5.6 Market capitalization

Each stock exchange exists for a different period of time, the management of stock exchanges is also different, and the number of companies listed on each stock exchange is also different, so there are also great differences in market capitalization.

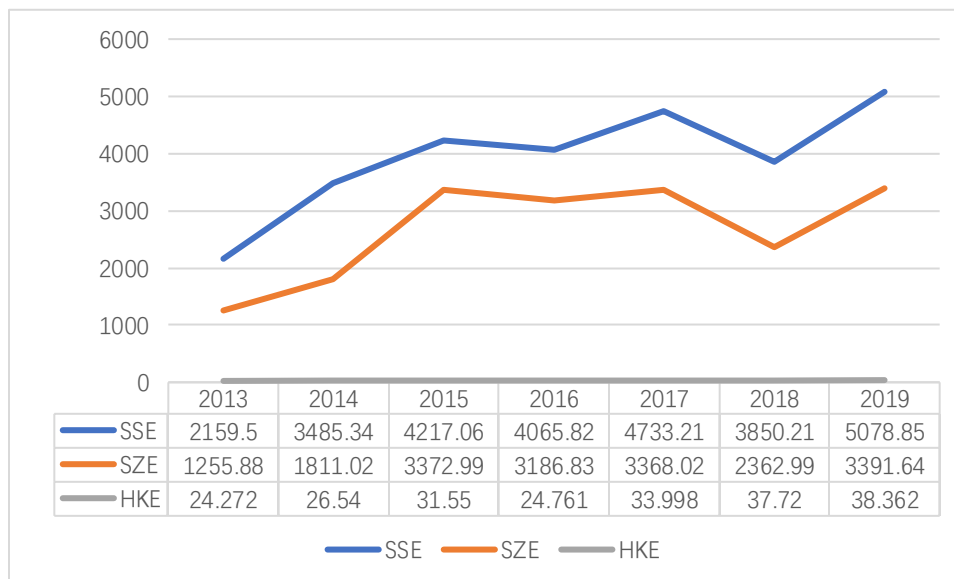
As of November 22, 2016, there were 1156 listed companies in Shanghai Stock Exchange, 9279 listed securities (including 1200 shares), with a total share capital of 3250.86 billion shares, a total market value of 29463.744 billion yuan, and a total market value of 24615.623 billion yuan. Shanghai Stock Exchange is a member of the International Securities Regulatory Commission, the Asian Federation of Jida Yangzhou stock exchanges and the World Federation of stock exchanges. In 2018, the market value ranked fourth in the world.

In recent years, the main board of Shenzhen Stock Exchange has achieved better and stronger stock through M & A and overall listing. By the end of April 2014, there were 480 listed companies on the main board of Shenzhen Stock Exchange, with a total share capital of 444.3 billion shares. Since 2001, the total amount of refinancing has reached 800.7 billion yuan. After ten years of preparation, gem was established in October 2009. By the end of April 2014, there were 379 GEM listed companies, with a total share capital of 75.88 billion shares and a total market value of 1.88 trillion yuan. In the global service entrepreneurship and innovation market, the market value is second only to Nasdaq. If Nasdaq only calculates the capital market sector, then China's growth enterprise market ranks first in the world.

According to the statistics of Hong Kong stock exchange, in 2018, Hong Kong's new share financing volume once again ranked first in the world. In 2018, 209 companies went public in Hong Kong, with a total financing amount of about HK \$280 billion (as of December 18). Among them, the new economy company's new issue has become the main force. As of December 18, 28 new economy companies have been listed in Hong Kong, raising about HK \$136 billion, accounting for nearly half of Hong Kong's IPO

(2018) total, the Hong Kong Stock Exchange reported.

Graph 5.8 Market Capitalization from 2013 to 2019 (unit: billion dollar)



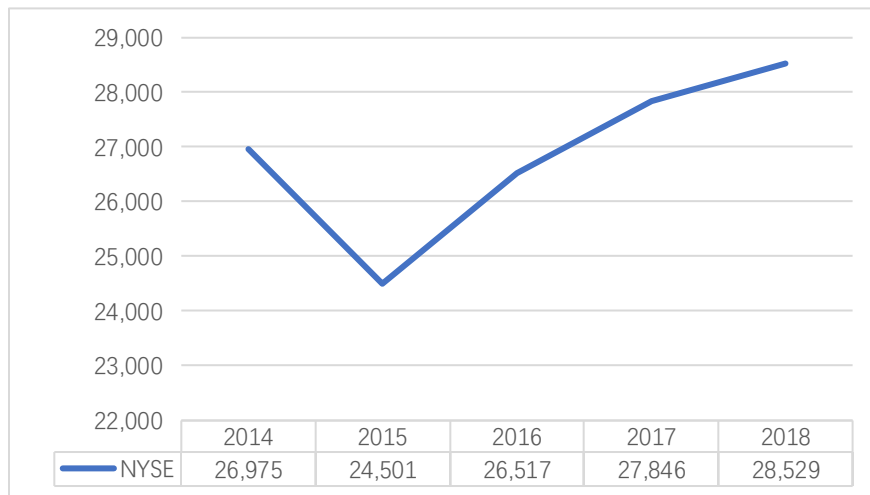
Source: SZSE, SSE, HKSE,

<http://www.szse.cn/market/stock/indicator/index.html>

<http://www.sse.com.cn/market/stockdata/overview/day/>

As of June 30, 2018, the market value of the New York Stock Exchange was \$28528761 million, with 2823 listed companies. In 2014, the market value of the NYSE was approximately US \$ 26,975 billion. In 2015, the market value of the NYSE was approximately US \$ 24,501 billion. In 2016, the market value of the NYSE was approximately US \$ 27,846 billion.

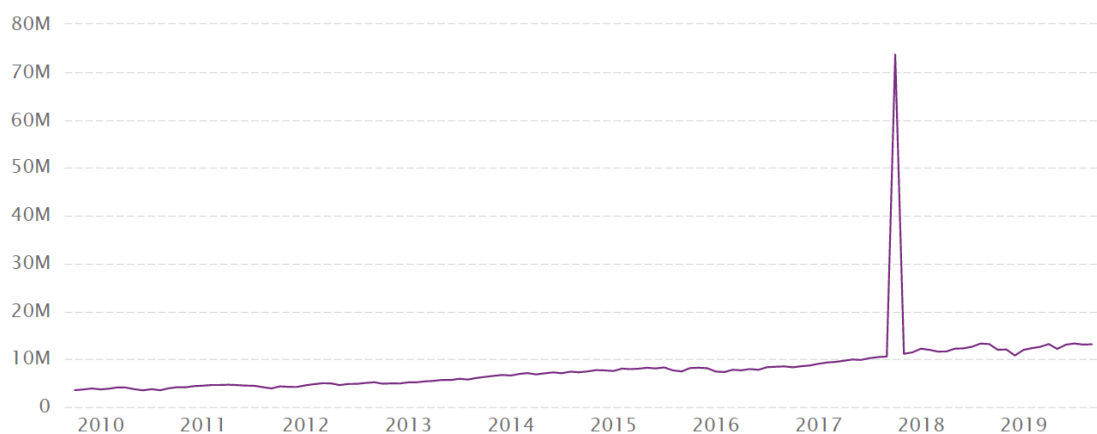
Graph 5.9 Market capitalization from 2014 to 2018 (unit: billion dollar)



Source: NYSE, <https://www.nyse.com/market-cap>.

As of July 2015, there are 3059 listed companies on Nasdaq Stock Exchange. As of January 2, 2020, the market value of Nasdaq Stock Exchange in the United States is \$14029208 million.

Graph 5.10 Market capitalization of Nasdaq

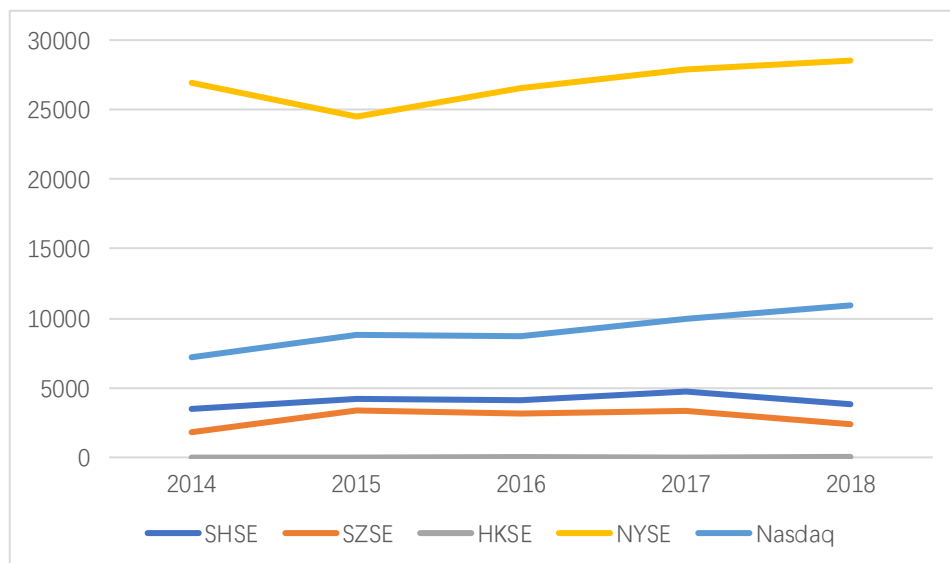


Source: <https://www.ceicdata.com/zh-hans/united-states/nasdaq-turnover-and-market-capitalization/market-capitalization-nasdaq>

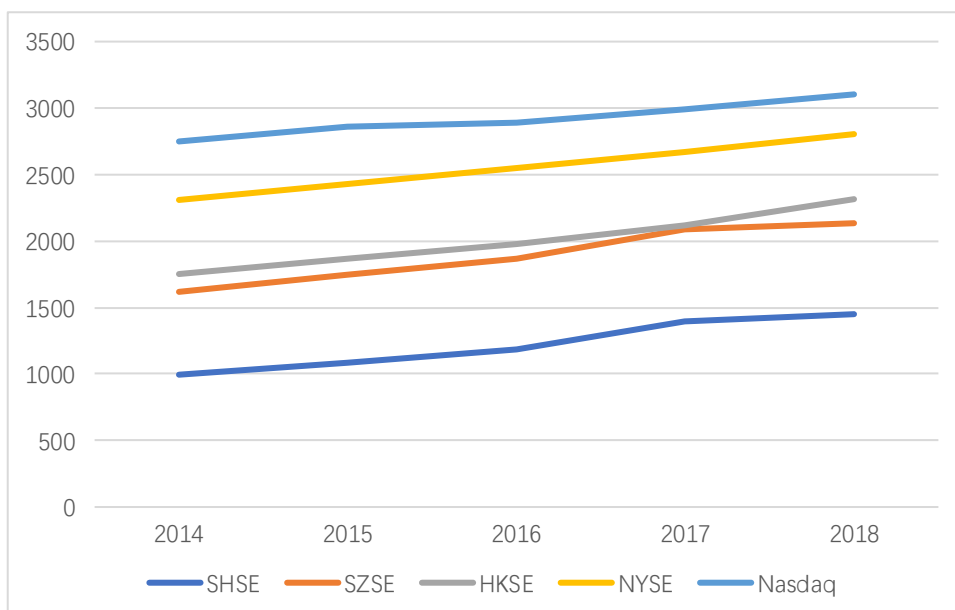
The New York Stock Exchange and Nasdaq are in the first two places in the world in terms of market value, and the Shanghai Stock Exchange and Shenzhen Stock Exchange are in the fourth and fifth places respectively. American Stock Exchange has a long history, so there is a big gap between Chinese stock exchange and American

Stock Exchange in market value.

Graph 5.11 Market capitalization 2014 to 2018 (unit: billion dollar)



Graph 5.12 Number of Listed Companies for the year end



Source: SSE, SZSE, HKSE, NYSE, Nasdaq

<http://www.sse.com.cn/home/search/?webswd=%E7%BB%9F%E8%AE%A1%E5%B9%B4%E9%89%B4>,

<http://www.szse.cn/market/periodical/year/index.html>

[https://www.hkex.com.hk/Global/HKEX-Market-Search-Result?sc_lang=zh-](https://www.hkex.com.hk/Global/HKEX-Market-Search-Result?sc_lang=zh-HK&mode=basic&q=annual%20reports&u=Market%20Data)

[https://www.nasdaq.com/solutions/annual-](https://www.nasdaq.com/solutions/annual-report)

5.7 Main Indexes

The basic situation of each country is different, and the situation of listed companies is also different, so each stock exchange has its own special index to measure.

Shanghai Stock Exchange stock index mainly includes Shanghai Composite Index, Shanghai 180 index, Shanghai 50 index, Shanghai 30 index, Shanghai dividend index, Shanghai dividend total return index, Shanghai 50 total return index, Shanghai 180 total return index, Shanghai A share index, Shanghai B share index, Shanghai corporate governance index and Shanghai Composite Index. Shanghai stock index is a statistical index reflecting the overall trend of listed stocks on Shanghai Stock Exchange. The sample of Shanghai stock index is all stocks listed on Shanghai Stock Exchange. The issuance of the Shanghai composite index is almost in step with the change of the stock market. It is of great reference value for the shareholders and securities practitioners to study the trend of the stock price.

Graph 5.13 The trend of Shanghai Stock Index in the past 20 years



Source: <https://g.co/kgs/S9s9j1>

Shenzhen stock market is an important asset allocation tool for investors to disperse the high risk of small and medium-sized enterprises and share the high growth and high return of Shenzhen market. After years of development, Shenzhen market has formed

five stock index systems with Shenzhen stock index, small and medium-sized stock index, gem index, Shenzhen stock 100 index and Shenzhen stock 300 index as the core. Among them, Shenzhen stock index, SME board index and gem index also have important scale functions, representing the whole market, SME board and gem respectively. Shenzhen composite index is the benchmark index of the whole market in Shenzhen. In the future, further research and improvement will be made to create a market benchmark index that can reasonably cover the main board, small and medium-sized board and growth enterprise board and meet the needs of future development.

Graph 5.14 Shenzhen Stock Exchange component stock price index trend in recent years



Source: <https://g.co/kgs/zbu5YN>

The Hong Kong index is a stock price index compiled by the Hong Kong stock exchange to reflect the changes in the Hong Kong stock market. The development stage of Hong Kong stock market. The Hong Kong index consists of 45 components, divided into six categories from listed stocks: finance, public use, real estate, integrated enterprises, industry and hotel. Based on the closing price of the opening day of the exchange, it is calculated from 1000 points and published every 15 minutes on the trading day. The Hong Kong Index ended the coexistence of the original five indexes of Hong Kong stock market (Hang Seng Index, gold index, silver index, Far East index and gold and silver composite index). However, most of the 45 components of Hong Kong index are Hang Seng Index. Because of its late emergence and lack of long-term

continuity, Hang Seng index is still the most important market index in Hong Kong stock market. The Hongkong index only plays a supplementary and auxiliary role.

Graph 5.15 Hang Seng Index Trends in Recent Years



Source: <https://g.co/kgs/ew4qqm>

The NYSE index includes the NYSE composite index, the Dow Jones Industrial Average and the S & P 500. Charles Dow uses this index to measure the industrial development of the US stock market. The S & P 500 is the second largest U.S. stock index after the Dow Jones industrial average. The S & P 500 has more companies than the Dow, so the risks are more diversified and reflect broader market changes. In addition, compared with the Dow Jones index, the standard & Poor's 500 index adopts the market value weighting method, which can better reflect the actual importance of the company's shares in the stock market. After the S & P 500, there are the S & P 400 for medium-sized companies and the S & P 600 for small companies. The total is the S & P 1500 composite index.

Graph 5.16 New York Stock Exchange Index Trend in Recent Years



Source: <https://g.co/kgs/XniU8i>

Nasdaq Stock Exchange indexes include Nasdaq composite index, Nasdaq 100 index and Nasdaq Biotechnology Index. The Nasdaq composite index is an important indicator of the price of the US Nasdaq stock market. The Nasdaq composite index was established on February 5, 1971, with a base point of 100. Its constituent shares include all the shares listed on NASDAQ in the United States. Nasdaq 100 index is a stock index composed of the largest domestic and international non-financial listed companies of Nasdaq 100 in the United States. It is based on market value and balances the impact of large market shares with some rules. Unlike the S & P 500, there are no financial institutions in the component stocks.

Graph 5.17 The Nasdaq Composite Index trend in recent years



Source: <https://g.co/kgs/NQ8L4b>

6 Conclusion

The purpose of this thesis is to compare the stock exchanges in China with those in the United States. This means to compare Shanghai Stock Exchange, Shenzhen Stock Exchange, Hong Kong stock exchange, Nasdaq Stock Exchange and New York Stock Exchange in terms of history, trading methods, market value, laws and regulations, IPOs, indexes, etc. In general, American stock exchanges have an earlier origin, a longer history, more mature, more comprehensive, better services, cheaper transaction fees and longer experience. China's stock exchanges have a larger internal market, better government policies, and more senior labor.

American stock exchanges are generally better than Chinese stock exchanges, and the influence of American stock exchanges in the world is also huge. It is precisely because of the advantages of the NYSE in terms of financial market efficiency, quality and dynamic interest rates, exchange rates and systems, the NYSE has become the world's largest stock market.

Shanghai Stock Exchange is an important infrastructure of China's capital market. China's securities market mainly includes four major products: stocks, stock derivatives, bonds and funds. The development of China's stock exchange market has basically kept pace with the development of China's macroeconomic situation. China is in a very important period of development and transformation, so China's stock exchanges are constantly realizing their own transformation and upgrading. China's stock exchanges are constantly strengthening market supervision, air defense financial risks, and protecting the legitimate rights and interests of investors.

In 2018, the Shanghai Stock Exchange will fully implement the vision and action plan for the construction of the "Belt and Road" services provided by the Shanghai Stock Exchange, accelerate the cooperation with the exchanges along the "Belt and Road" in technology, products, management, etc. Hong Kong Connect mechanism. Cooperate with A shares to officially join the MSCI index, support the China-Europe Exchange to carry out the pilot business of supplementary business, and expand the issuance of "panda bonds" by foreign companies.

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List of Abbreviations

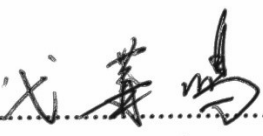
GEM	Growth Enterprise Market
HSI	Hang Seng Index
NQB	National Quotation Bureau
OTC	Over the Counter
NASD	National Association of securities dealers
CSRC	CHINA SECURITIES REGULATORY COMMISSION
OTCBB	Over the Counter Bulletin Board
DJIA	Dow Jones Industrial Average

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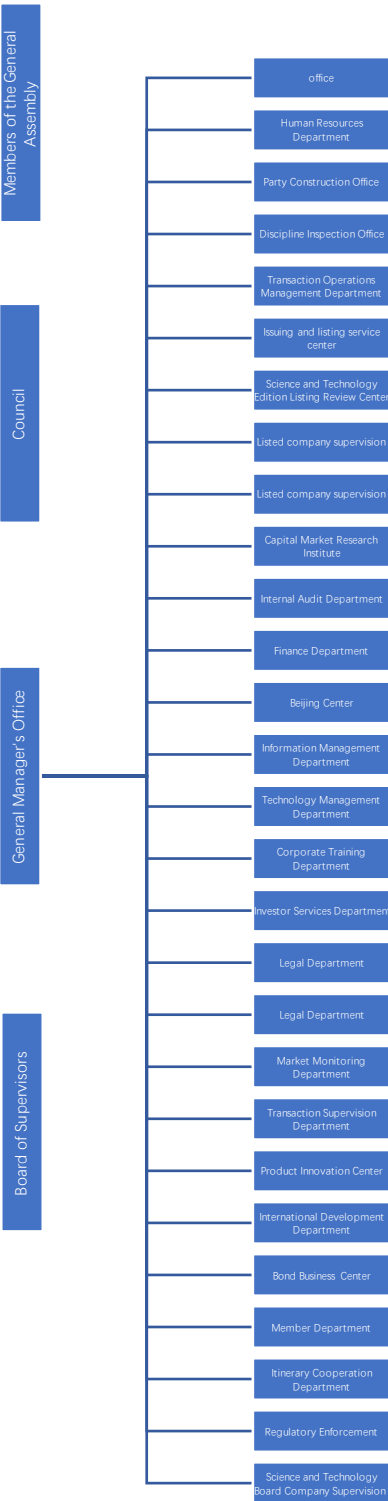
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List of Annexes

Annex 1 Organizational structure of Shanghai Stock Exchange

Annex 1 Organizational structure of Shanghai Stock Exchange



Source: <https://baike.baidu.com/item/%E4%B8%8A%E6%B5%B7%E8%AF%81%E5%88%B8%E4%BA%A4%E6%98%93%E6%89%80>, own processing

